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FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)	
)	
Amendment of Section 73.622)	RM No. _____
Of the Commission's Rules)	
Digital Television Table of Allotments)	MM Docket No. _____
(Lexington, Kentucky))	

To: The Chief, Allocations Branch

PETITION FOR RULEMAKING

WKYT Licensee Corp. ("WKYT"), a wholly-owned subsidiary of Gray Communications Systems, Inc., licensee of commercial television station WKYT-TV, NTSC Channel 27, Lexington, Kentucky, hereby respectfully petitions the Federal Communications Commission ("FCC" or "Commission") for rulemaking to modify Commission's Digital Television Table of Allotments, as described in section 73.622 of the Commission's Rules.¹ Specifically, WKYT requests that the Commission substitute DTV Channel 13, in lieu of Channel 59, Lexington, Kentucky, as the digital television allotment to be used by the digital television station WKYT-DT, and to take any other steps necessary to enable WKYT to apply to construct and ultimately operate its facilities on Channel 13, as described in the attached Engineering Statement (the "Proposal").

¹ 47 C.F.R. § 73.622.

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In a series of orders, the Commission has specified Channels 2-51 as digital television core spectrum (the “Core Spectrum”).² Television stations may operate outside the Core Spectrum during the period in which such stations are transitioning to digital broadcasts (the “Transition Period”). After the Transition Period, however, television stations broadcasting on channels outside the Core Spectrum must surrender their licenses for such channels and commence digital broadcast operations on some channel within the Core Spectrum.³ Accordingly, any station with a digital allotment outside the Core Spectrum, in most cases, would have to construct two digital facilities – one to be used on the non-core channel during the Transition Period, and one to be use on a core channel after the Transition Period.

In the *Reconsideration Order*, the Commission “recognize[d] the additional burden placed on licensees with out-of-core DTV allotments.”⁴ The Commission promised that “to the extent that in-core channels [are] available during the transition, [it] will attempt to further reduce the number of out-of-core allotments” through “future amendments to the Table.”⁵

Adoption of the Proposal would enable the Commission to mitigate the burdens of the digital transition on WKYT. If the Commission adopts the Proposal, which would substitute a Core Spectrum digital allotment for WKYT-DT for the current, non-core

² See, e.g. *In re Advanced Television Systems, Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order*, 13 FCC Rcd 7418, paras. 42-46 (1998) (“*Reconsideration Order*”); *In re Advanced Television Systems, Sixth Report and Order*, 12 FCC Rcd 14588 (1997) (“*Sixth Report and Order*”).

³ See, e.g., *Reconsideration Order*, paras. 55-58.

⁴ *Id.* at para. 55.

⁵ *Id.* at para. 56.

allotment, WKYT would need to design and construct only one set of digital transmission facilities. Accordingly, the Proposal would reduce the construction costs WKYT will incur in making its digital transition, which would enable more of the station's limited funds to continue to be used to maintain and improve other aspects of its services and avoid technical, legal and equipment costs.

An Engineering Statement prepared by Cavell Mertz & Davis, Inc., attached as Exhibit 1 and incorporated by reference in this Petition, confirms that the proposed allotment change is consistent with the Commission's technical rules. Specifically, the analysis demonstrates that the proposed allotment change would not result in inappropriate levels of interference to other DTV allotments or existing NTSC stations.⁶

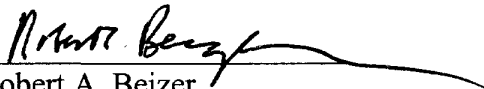
WKYT hereby affirms that it will apply for the allotted channel if its Proposal is granted. However, pending completion of the rulemaking, WKYT intends to apply for Channel 59, thus meeting the November 1, 1999, filing deadline.

⁶ See 47 C.F.R. § 73.623; see also *Sixth Report and Order*, paras. 221-22.

For all the foregoing reasons, the Commission should adopt the Petition, approve the proposed modification in WKYT's channel allotment, and make all other changes necessary and appropriate to enable WKYT to apply to construct WKYT-DT's transmission facilities on Channel 13.

Respectfully submitted,

WKYT LICENSEE CORP.


Robert A. Beizer
Secretary

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July 21, 1999

EXHIBIT 1

(Technical Statement)



ENGINEERING STATEMENT

prepared for

WKYT Licensee Corp.

WKYT-DT Lexington, Kentucky

This engineering statement has been prepared on behalf of *WKYT Licensee Corp. (WLC)*, in support of a *Petition for Rulemaking*. In of the Federal Communications Commission's Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders on Advanced Television,¹ DTV Channel 59 was allotted as a "paired" channel for the WKYT-TV analog Channel 27. An substitute DTV channel is proposed herein for WKYT-DT.

Discussion

The Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order ("MO&O") in MM Docket 87-268² specified a core set of television channels for ultimate DTV use, thus permitting "recovery" of part of the existing television broadcast spectrum. The *MO&O* states that the core will consist of channels 2 through 51. The DTV table of allotments was prepared to minimize the use of channels 60 through 69 to facilitate early recovery of these channels. Further, allotments on channels 52 through 59 have been avoided where possible. Stations with DTV allotments on channels 52 through 69 will be required to change channels at the conclusion of the transition period. Accordingly, the *MO&O*'s DTV allotments have been made on channels 2 through 51 wherever possible.

For the case at hand, DTV Channel 59 has been allotted for use by WKYT-DT. WKYT-DT's use of DTV Channel 59 would extend only through the transition period, following which *WLC* would be required to move the WKYT-DT facility to an as-yet undetermined channel within the core. At that time, WKYT-DT could use its existing NTSC Channel 27 as its DTV channel. Since *WLC* will in any event ultimately have to change the channel of its DTV facility following the transition period, a more "seamless" transition can be made if it can achieve assignment of an alternative DTV channel *within* the core now.

¹See MM Docket 87-268, *Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service*, FCC 98-315, released December 18, 1998.

²See FCC 97-115 *Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service*, released February 23, 1998.

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An engineering review of the DTV allotments and NTSC assignments in the region surrounding Lexington showed that an alternate channel could be used for WKYT-DT. Detailed interference studies were conducted in accordance with the terrain dependent Longley-Rice point-to-point propagation model, per the Commission's Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, July 2, 1997 ("OET-69").¹ The studies showed that Channel 13 could be used for WKYT-DT at 5 kW effective radiated power. DTV Channel 13 at Lexington would provide coverage to over 100 percent of the area and population of the interference-limited WKYT-TV NTSC Channel 27.

All stations considered in this study are listed in the attached **Table 1**. The results of the interference study, also summarized in **Table 1**, indicate that any additional interference to these stations meets the Commission's 2% / 10% interference limits regarding DTV proposals. Thus, this proposal is believed to be in compliance with the provisions of §73.623(c)(2) of the Commission's rules.

The technical data for the proposed Channel 13 allotment is summarized on the following page. The location and antenna height are the same as that for the current DTV Channel 59 allotment for WKYT-DT, except that the geographic coordinates as stated on the Antenna Structure Registration for the tower (number 1030383) are provided (these coordinates differ from the current reference coordinates by 1 second latitude and 1 second longitude).

¹The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein, except that the terrain profile step size is 0.1 km (which provides a finer resolution than the Commission's standard 1 km step size). A standard cell size of 2 km was used. The Longley-Rice computer program input data, following the guidelines established under OET-69, includes a location variability of 50%, a time availability of 10%, a situation variability of 50%, horizontal polarization, 0.005 S/m conductivity, a climate constant of 15, an assumption of a continental temperate climate zone, and a receive antenna height of 10 meters. The service area for each DTV facility under study is that area predicted to receive signal levels of at least 36 dB μ using the Longley-Rice methodology, and within the DTV F(50,90) 36 dB μ service contour distance as determined per §73.625(b). The service area for each NTSC facility under study is that area predicted to receive signal levels of at least 56 dB μ using the Longley-Rice methodology, and within the NTSC F(50,50) 56 dB μ service contour distance as determined per §73.684(c). Comparisons of various results of this computer program to the Commission's implementation of OET-69 show good correlation.

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Summary Technical Data for Proposed DTV Channel 13 Substitution Lexington, Kentucky

Coordinates (NAD-27)	38° 02' 23" N-Lat 84° 24' 10" W-Lon
Channel	13
Effective Radiated Power	5 kW (non-directional)
Antenna Height	593 m AMSL 300 m HAAT

Summary

It is proposed that WKYT-DT Lexington, Kentucky be permitted to substitute DTV Channel 13 in lieu of the allotted DTV Channel 59. Over 100 percent replication of the area and population coverage of the existing WKYT-TV NTSC Channel 27 will be provided. Any interference caused to other DTV allotments or NTSC assignments meets the Commission's 2% / 10% *de minimis* limits. The use of DTV Channel 13 for WKYT-DT would not require WLC to later change channels, as is the case with the current Channel 59 allotment. The power utility and other operating expenses of a 5 kW DTV facility will be reduced from that of a comparable UHF DTV facility.

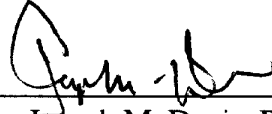
Certification

Under the penalty of perjury, the undersigned hereby certifies that the foregoing statement was prepared by him or under his direction, and that it is true and correct to the best of his knowledge and belief. Mr. Davis is a principal in the firm of *Cavell, Mertz & Davis, Inc.*, is a Registered Professional Engineer in Virginia, holds a Bachelor of Science degree from Old Dominion University in Electrical Engineering Technology, and has submitted numerous

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engineering exhibits to various local governmental authorities and the Federal Communications Commission. His qualifications are a matter of record with that entity.

A handwritten signature in black ink, appearing to read "Joseph M. Davis", is written over a horizontal line.

Joseph M. Davis, P.E.

July 14, 1999

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Table 1
INTERFERENCE ANALYSIS RESULTS SUMMARY
 prepared for
WKYT Licensee Corp.
 WKYT-DT Lexington, Kentucky

<u>Stations Considered</u>	<u>City, State Channel, Type</u>	<u>Distance (km)</u>	<u>Baseline Population (1)</u>	<u>Initial Interference Percentage (2)</u>	<u>Additional Interference Percentage (3)</u>	<u>Proposed Change in Interference Population (4)</u>	<u>Proposed Change in Interference Percentage (5)</u>	<u>Final Interference Percentage (6)</u>
WKRC-TV (LIC)	Cincinnati, OH 12 NTSC	119.8	2,974,686	0.1	0.0	1,225	0.0	0.1
WYMT-DT (reference)	Hazard, KY 12 DTV	143.0	----- No interference predicted from proposal -----					
WOWK-TV (LIC)	Huntington, WV 13 NTSC	198.8	1,041,006	4.5	0.0	574	0.1	4.6
WBKO (TV) (LIC)	Bowling Green, KY 13 NTSC	209.7	604,092	0.0	0.0	8,583	1.4	1.4
WSYX-DT (reference)	Columbus, OH 13 DTV	242.3	2,056,000	0.0	0.0	294	0.0	0.0
WTHR (TV) (LIC)	Indianapolis, IN 13 NTSC	260.3	2,314,419	0.0	0.0	321	0.0	0.0
WRCB-DT (PRM)	Chattanooga, TN 13 DTV	304.9	----- No interference predicted from proposal -----					
WLOS (TV) (LIC)	Asheville, NC 13 NTSC	325.2	----- No interference predicted from proposal -----					

Table 1
INTERFERENCE ANALYSIS RESULTS SUMMARY
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<u>Stations Considered</u>	<u>City, State Channel, Type</u>	<u>Distance (km)</u>	<u>Baseline Population (1)</u>	<u>Initial Interference Percentage (2)</u>	<u>Additional Interference Percentage (3)</u>	<u>Proposed Change in Interference Population (4)</u>	<u>Proposed Change in Interference Percentage (5)</u>	<u>Final Interference Percentage (6)</u>
WPXS (TV) (LIC)	Mt Vernon, IL 13 NTSC	399.5		----- No interference predicted from proposal -----				
WTVG (TV) (LIC)	Toledo, OH 13 NTSC	413.3		----- No interference predicted from proposal -----				

Notes:

- (1) For DTV stations, greater of NTSC or DTV Service Population, from FCC Table
For NTSC stations, total population within noise-limited contour
 - (2) For DTV stations, 100 percent minus FCC Table initial DTV/NTSC population match
For NTSC stations, initial percent loss: percent of population within (1) predicted to receive DTV only interference from FCC Table
 - (3) Additional interference experienced due to DTV facilities authorized subsequent to initial allotment table
 - (4) Net change in population receiving interference resulting from proposal
 - (5) Proposal's impact in terms of percentage, equals (4)/(1) times 100 percent: not to exceed *de minimis* limit of 2.0 percent
 - (6) Total interference: equals (2) + (3) + (5); proposal may not increase (2) +(3) above 10 percent
- The determination of stations for consideration and the determination of baseline population and interference percentages were made as described in the Commission's August 10, 1998 Public Notice "*Additional Application Processing Guidelines for Digital Television*"